## California's Surface Water Ambient Monitoring Program

# Response to SPARC

Water Boards

SWAMP
Surface Water Ambient Monitoring Program

# Initial RT Response

- Strongly support all SPARC recommendations
- Actively addressing all recommendations
- Two Board workshops
- 12 stakeholder meetings; 10 RT meetings
  - Board Management (MCC; Program Leads)
  - Board Management/Regulated Community (SCCWRP Commission)
  - CASQA (CA Stormwater Quality Ass.)
  - Other Agencies (IACC – NPS Monitoring Council)
  - Client Panel
- Two draft assessments; four draft workplans
- Reconvene with SPARC (March)
- Final Report w/ staff chapter (March 31st)
- 3rd Board workshop (April)

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# SPARC Recommendations

1. Reevaluate the original program goals.
2. Identify key target audiences.
3. Develop and implement a programmatic communication strategy.
4. Develop a statewide assessment framework.
5. Take more advantage of available resources.
6. Realign program management and decision making with the revised program goals.

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# SWAMP Proposed Response

Reevaluate the original program goals.

- Priorities set for next two years; contingent on funding

Identify key target audiences.

- Completed

Develop and implement a programmatic communication strategy.

- Workplan almost complete; implementation started

Develop a statewide assessment framework.

- Ongoing; Identified basic tenets; Developed two workplans

Take more advantage of available resources.

- Ongoing; making progress

Realign program management and decision making with the revised program goals.

- Ongoing; making progress; workplan being developed

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# SWAMP Budget for FY06-07

- $ 0
- $3.4 million (current)
- $4.5 million
- $7.9 million (likely?)
- $11.9 million *

- Planning has never been so simple!

- *After SPARC report sent to legislature

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# Recommendation 1.
# Reevaluate Program Goal

- Revisit 2000 Report to Legislature.
- Match responsibilities with funding.
- Define role of SWAMP relative to other Board programs, and give SWAMP authority to perform this role.
- Enhance statewide assessment capability.

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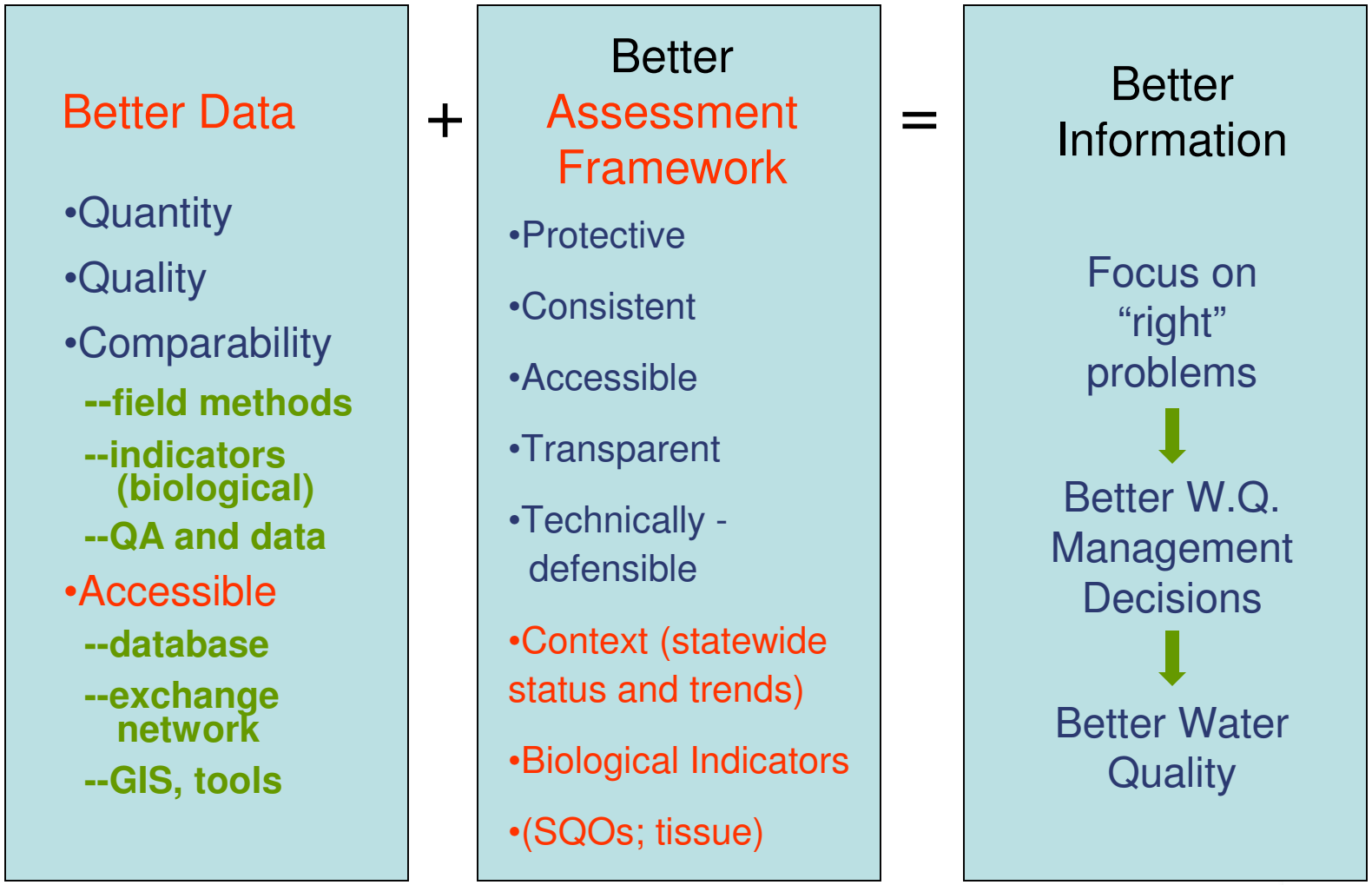
# "Fix" 305(b) and 303(d) Process



# Response 1.
# Reevaluating program goals

- New SWAMP Priorities:
  - All Board water quality data will be comparable, high quality and Internet accessible. Expert Workshop on data management
  - Develop statewide assessment framework-- focused initially on key biological indicators.
    - White paper on role of biological assessment in WQC.
    - Expert workshop on statewide design.
    - Expert workshop on Biological Assessment Program
  - Partner to expand state assessments. Develop strategy.

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# Accessible Data

- Stay the course on QA and data management
- All Board data
- Regulatory Program Data
- GIS tools  (2009)
- CEDEN
- Technical Workshop; SB1070

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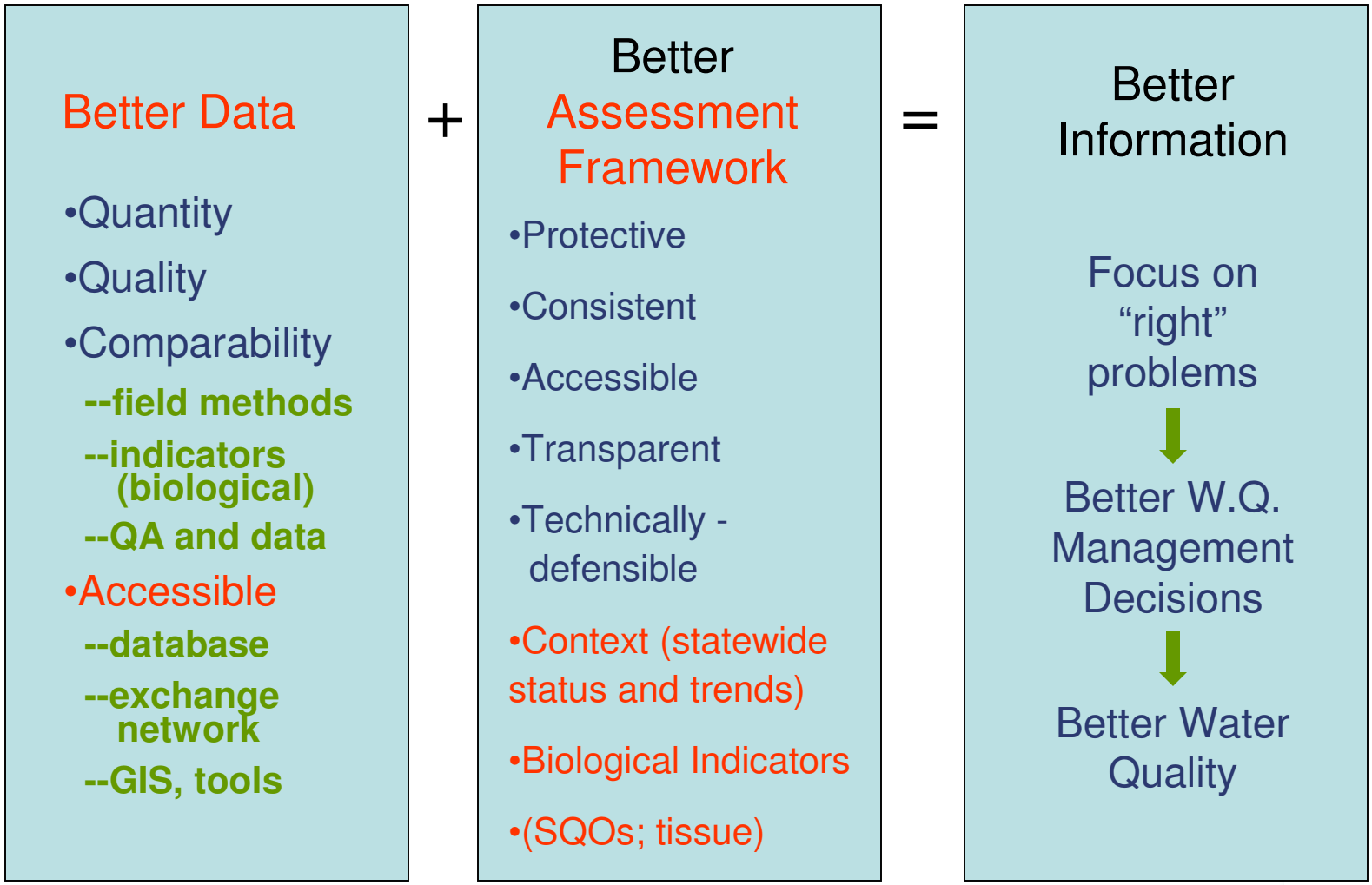
# "Fix" 305(b) and 303(d) Process



# Monitoring Philosophy

- Monitoring data should be focused on answering questions
  - **No data collection for data's sake**
  - **Answered questions should result in management action**

- The greater the impact, the greater the monitoring
  - **- less impact means less monitoring**

- Three part monitoring framework
  - **- core monitoring, regional monitoring, special studies**

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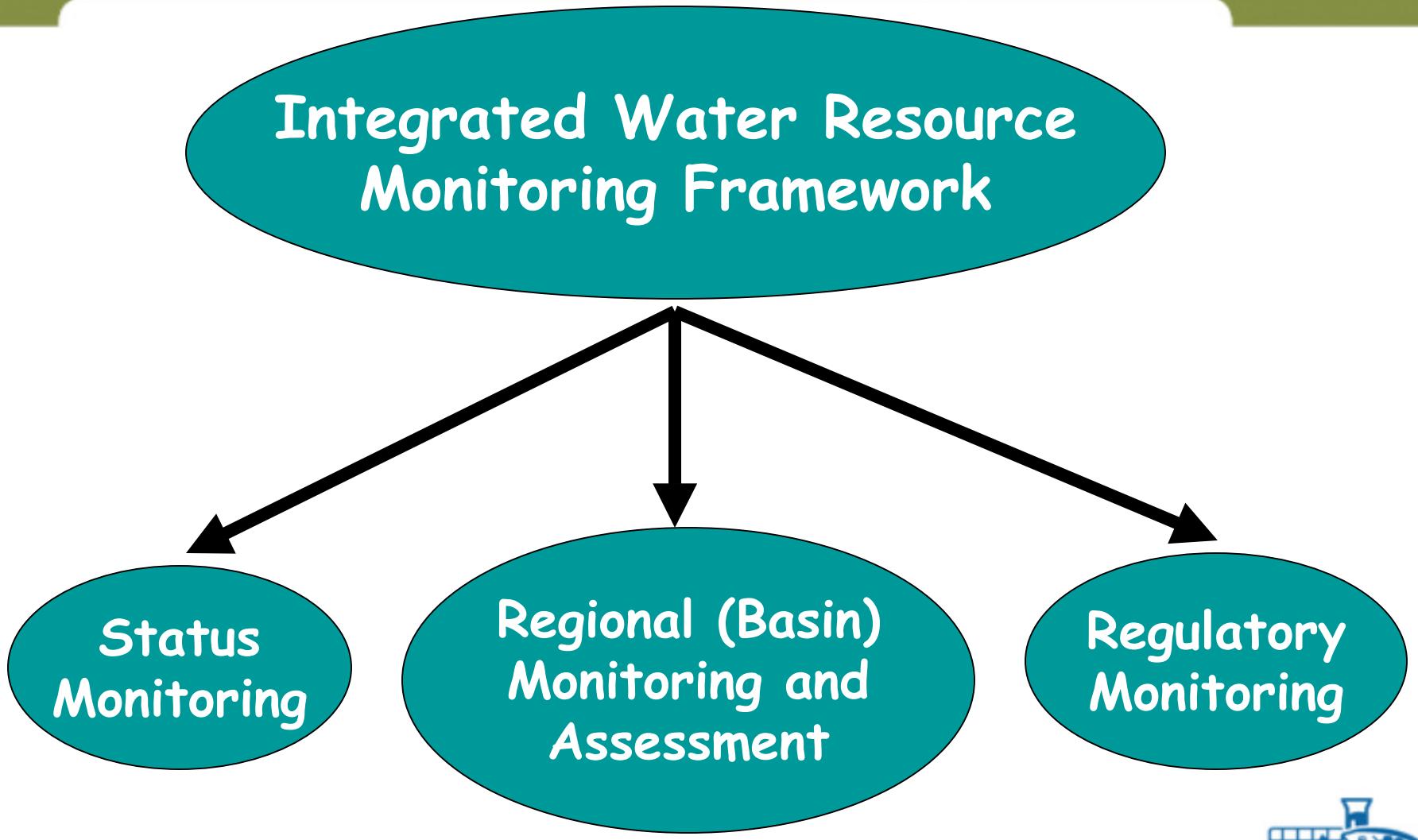


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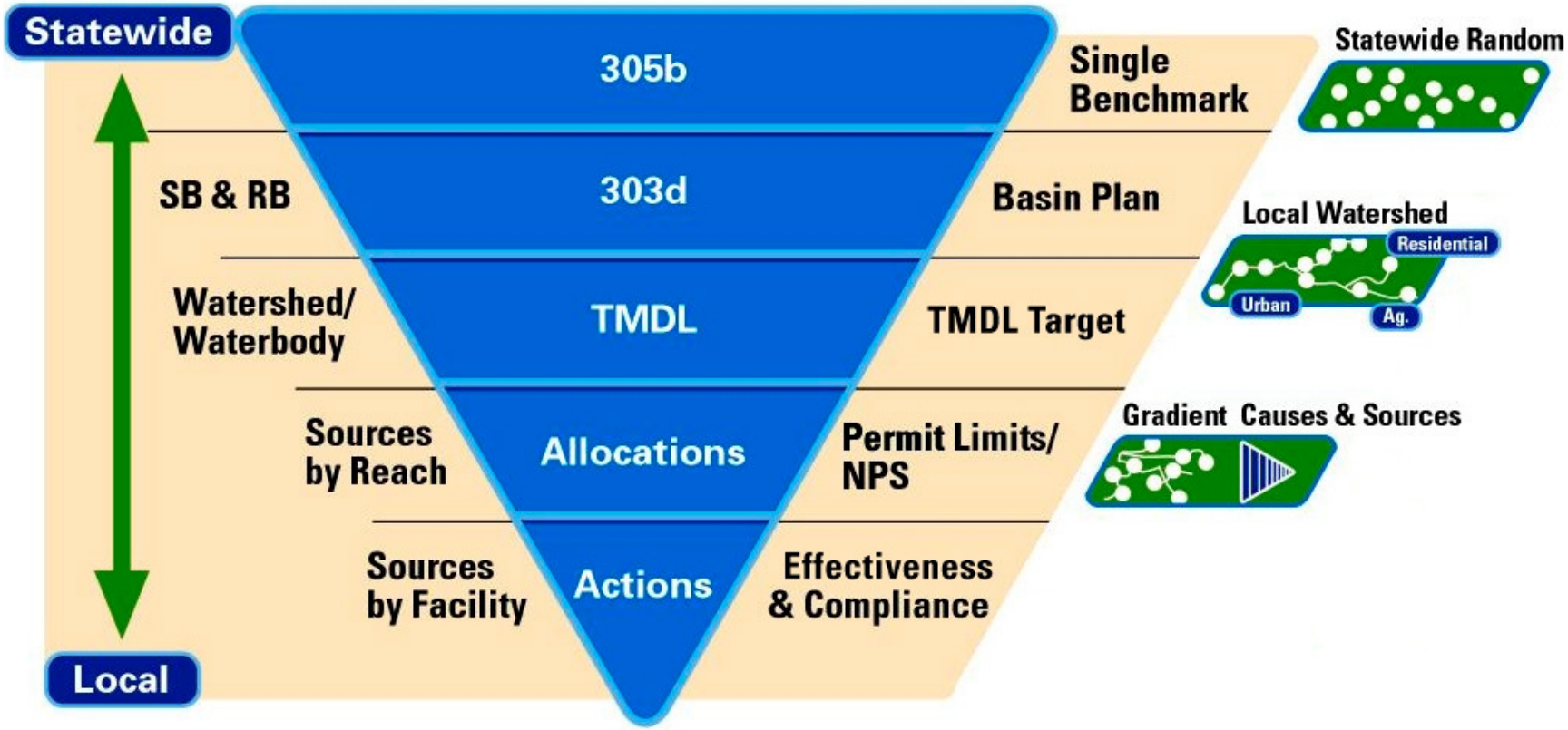
# Statewide Assessment Framework

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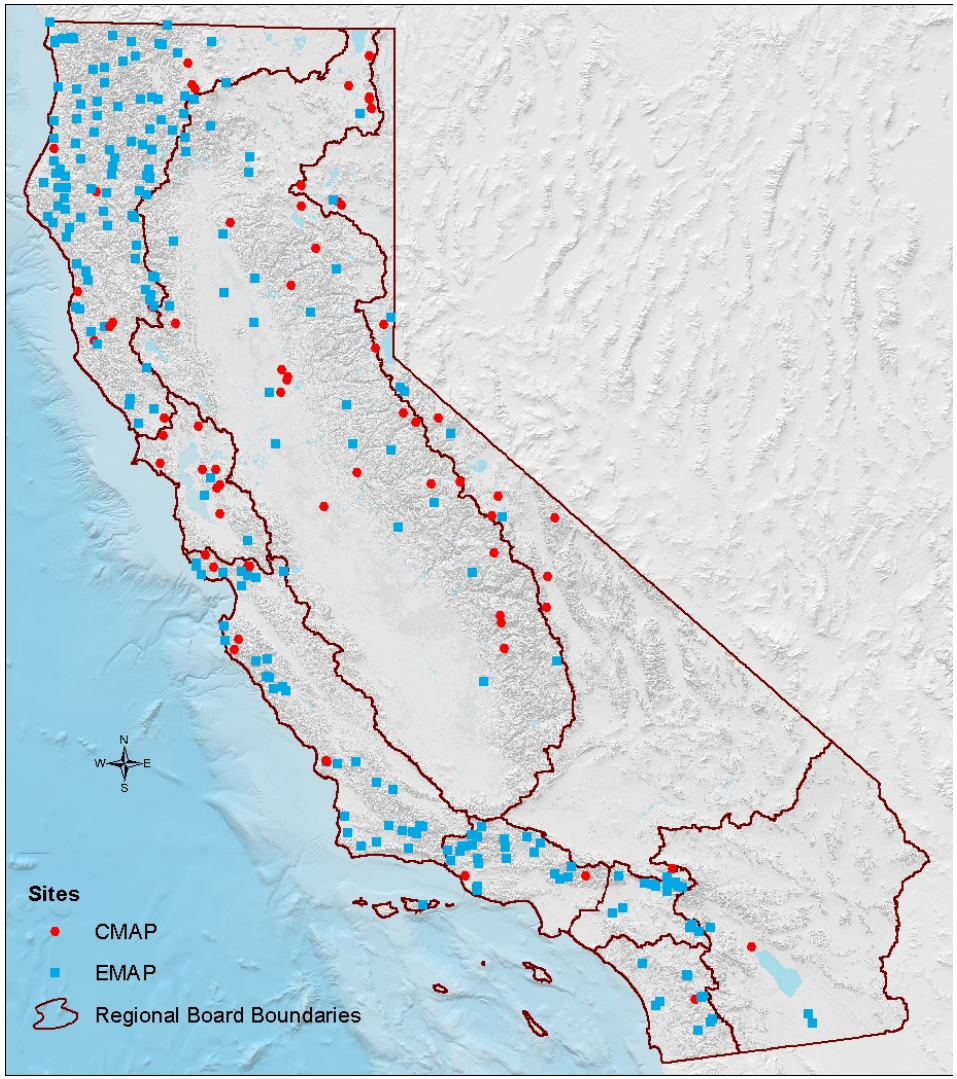
# Wadable Stream Ecological Assessments




**Inland surface waters**

**Probability-based sampling**

**W-EMAP**

2000-2003

Base statewide study 50 sites/year

3 special study areas CA

**SWAMP-NPS**

Sampling initiated 2004

50 sites/year statewide

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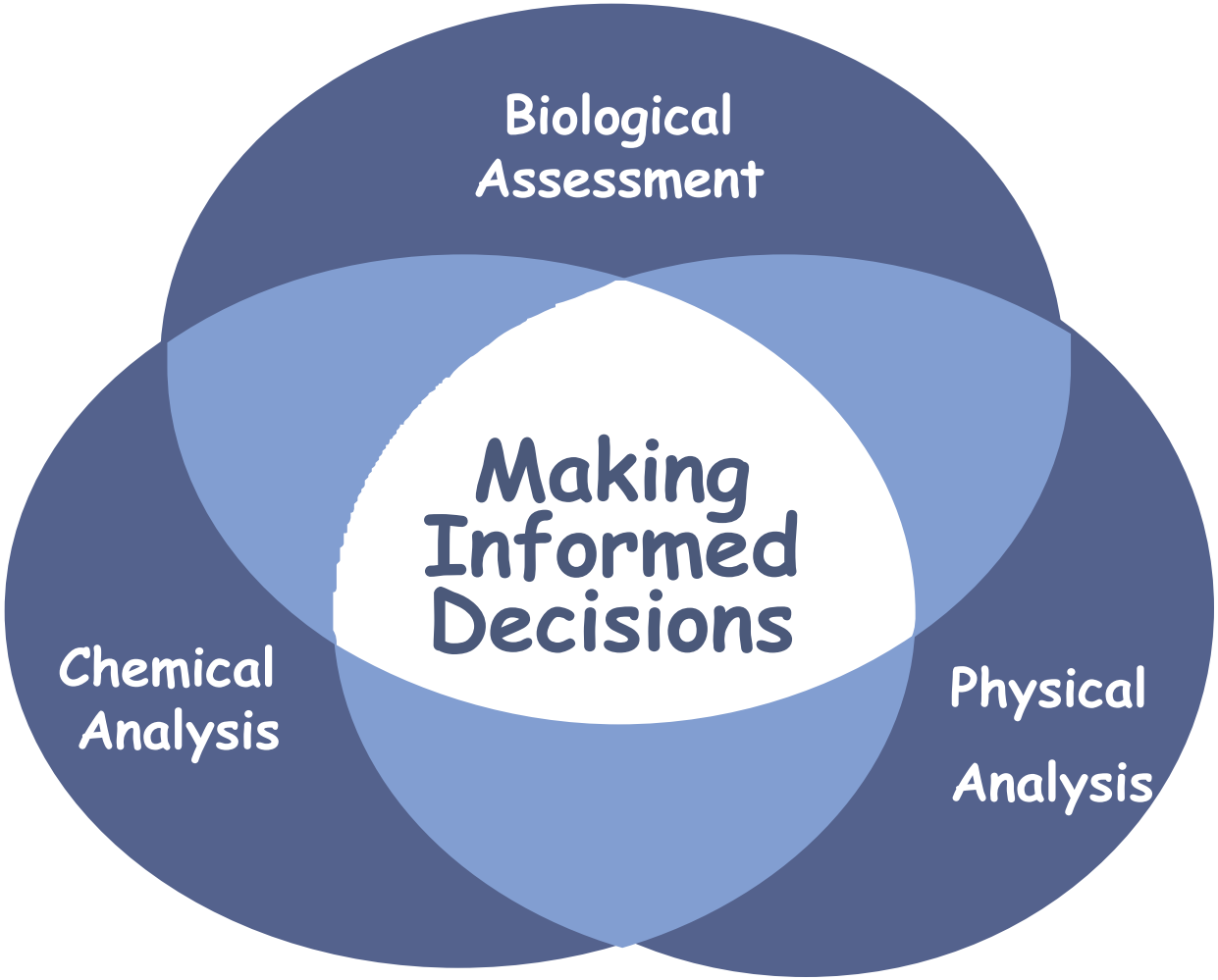
# Waterbody/Beneficial Use Matrix

| Water Body Type | Beneficial Use | | | |
|---|---|---|---|---|
| | Aquatic Life | "Fishable" | "Swimmable" | "Drinkable" |
| Wadable Streams | *CMAP (Bioassessment)* | | *Monitoring Summary* | |
| Large Rivers | | | *Monitoring Summary* | |
| Lakes | | *New Proposal* | *Monitoring Summary* | |
| Coastal Waters | *Coastal EMAP (SQO's)* | *New Proposal* | *Clean Beach Program* | *NA* |
| Bays/ Estuaries | *Coastal EMAP (SQOs)* | *New Proposal* | *Clean Beach Program* | *NA* |
| Wetlands | *Inventory Project (CRAM)* | | *NA* | *NA* |

# Biological Component Lacking

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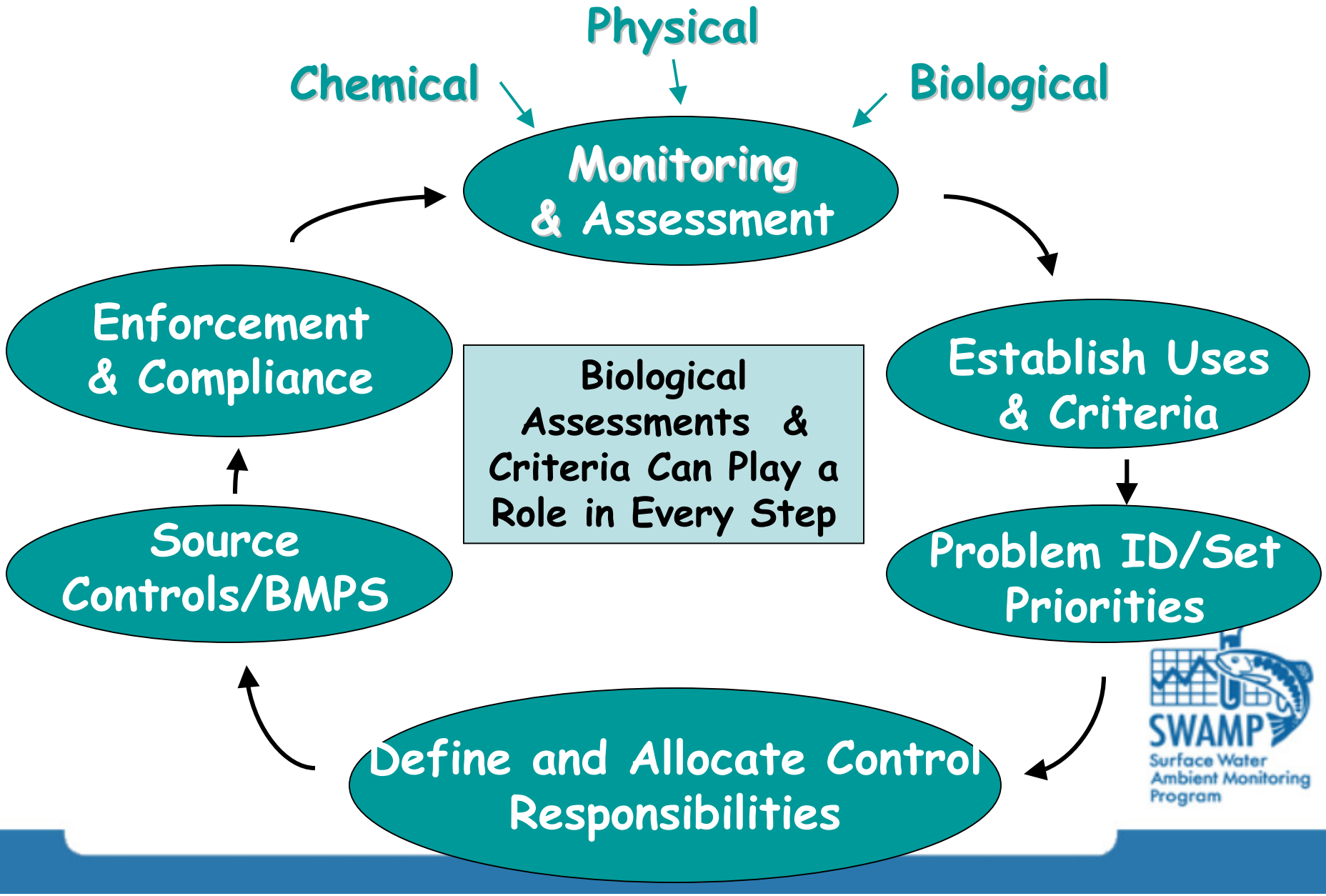
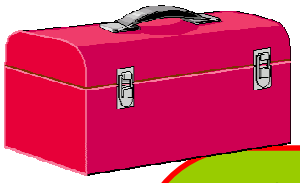
# CWA WATER PROGRAM



# Building a Comprehensive Bioassessment Program for California



## The "Toolbox"

**Tools**
- IBIs, RIVPACS models
- Reference conditions
- Thresholds for TALU
- Refined tolerance values
- Stressor linkages
- GIS watershed tools

**Infrastructure**
- Field/lab capacity & training
- Database & CalEDAS
- QA/QC program

## Research Program

- Methods comparisons
- GIS tools (reference site selection, etc.)
- spatial applicability (reach > segment)
- QA/QC questions
- Tolerance values refinement
- Diagnostic techniques (stressor ID)
- Additional bio-indicators (i.e., algae)
- Physical habitat indicators

## Regulatory Application

- Assessment & reporting
- Evaluate mgmt practices
- Numeric biocriteria & TALU
- TMDL targets
- Permit conditions
- Enforcement Programs

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# Recommendation 2.
# Identify clients

- Identify Clients for SWAMP services
- Clients with mix of local and statewide perspectives
- Assess client needs
- Take advantage of grant requirement for comparability
  - Utilize QA and data management activities to build links to SWAMP.

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# Client Selection Criteria

- Ability to directly use info. to improve w.q.
- Would change their behavior based on info.
- Federal  & State regulations or requirements.
- Ability to “make or break” SWAMP.
- Source of SWAMP funding

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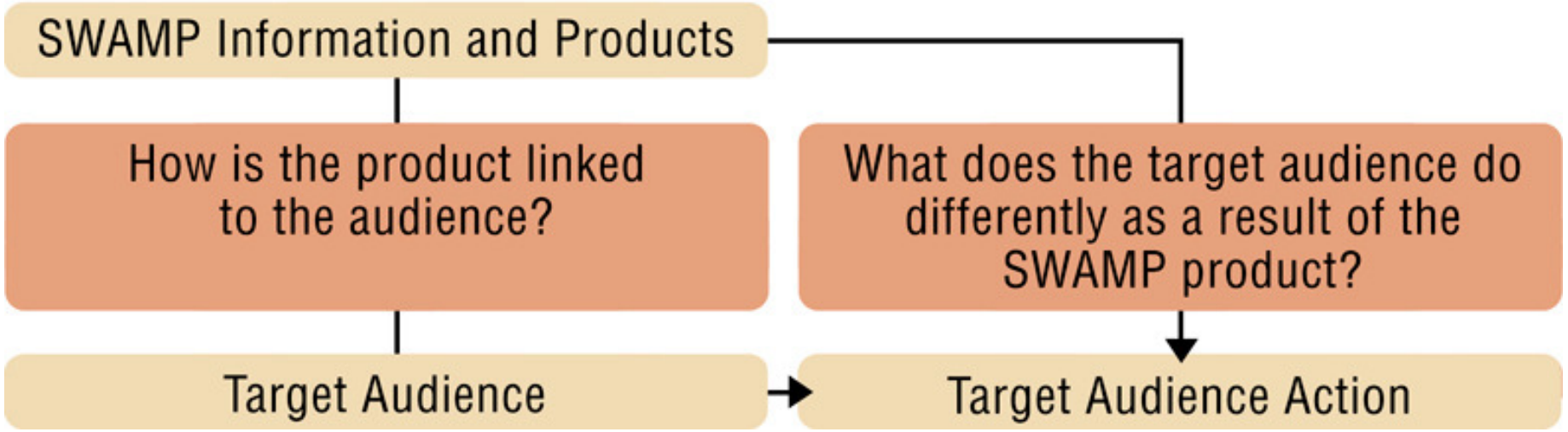
# PRODUCT/AUDIENCE LINK

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# Response 2.
# Client identification-Client Chains

Direct Clients

- Water Board Program staff
- Regulated Community

- Indirect Clients
  - Public
  - US EPA, Other agencies and monitoring entities
  - Grantees – Need help meeting requirements
  - Environmental Community
  - Legislature

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# Recommendation 3.
# Implement a communication strategy

- Develop communication strategy based on program goals and client needs
  - Signature products
  - Raw data to higher level syntheses and summaries
- Comprehensive analysis should use other data
- Schedule for routine production of products
- Look at mature programs for examples
  - Tailor the look
  - Target the audiences

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# Recommendation 5.
## Take advantage of available resources

- Developing a systematic strategy at the program level (State Board, Regional Board) for coordinating with other large monitoring efforts, particularly NPS and those driven by permits.
  - Program and NPDES driven regional efforts (e.g. SCCWRP, SFEI)
- Implementing more consistent, stronger, and broader connections with major monitoring efforts at the local, regional and statewide level. (External Liaisons)
- SWAMP will continue working with similar programs in other states and at the federal level through National Monitoring Council.
- RT will attend National Monitoring Conference in May 2006*

*SPARC recommendation

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# Regional Monitoring Workplan

- Integrated and collaborative watershed monitoring
  - cost effectiveness
  - potential for nested sampling designs
- Enables ongoing large-scale assessments of watershed condition
  - how does your site compare?
  - regional reference condition
- Improves agency quality and comparability
  - - need to compile data sets

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# Recommendation 6.
## Align management and decisions with goals

- Evaluate current management structure and decision-making relative to
  - revised program goals,
  - regulatory and monitoring efforts,
  - statewide assessment strategy
- Balance the benefits of collaborative decision making among the Roundtable with mechanisms for moving forward in the absence of consensus
- Develop a systematic decision process for setting priorities.
  - Monitoring, pilot projects, indicator development, assessment
- Develop a clearinghouse to facilitate information sharing among the regions

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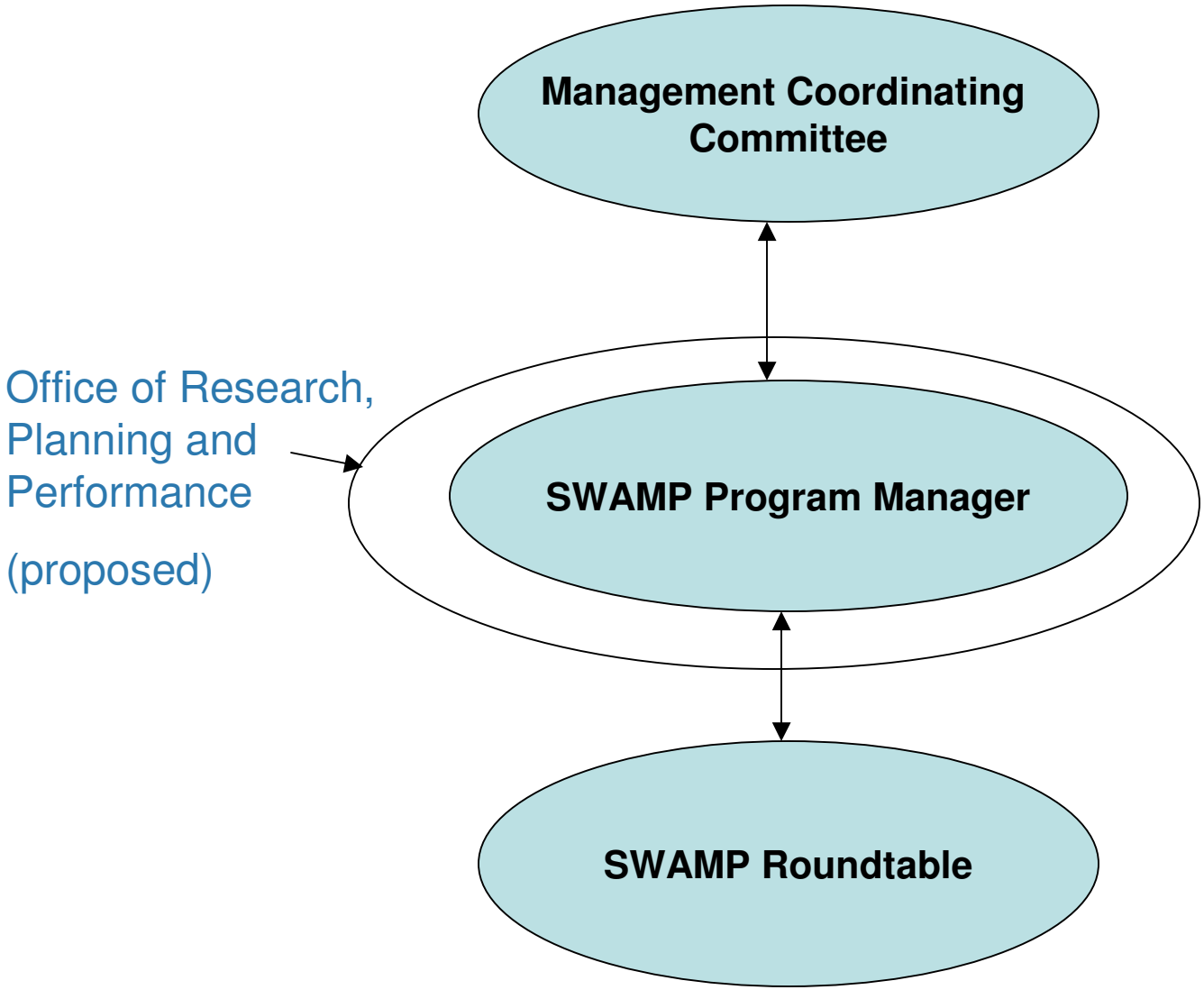
# Proposed SWAMP Structure

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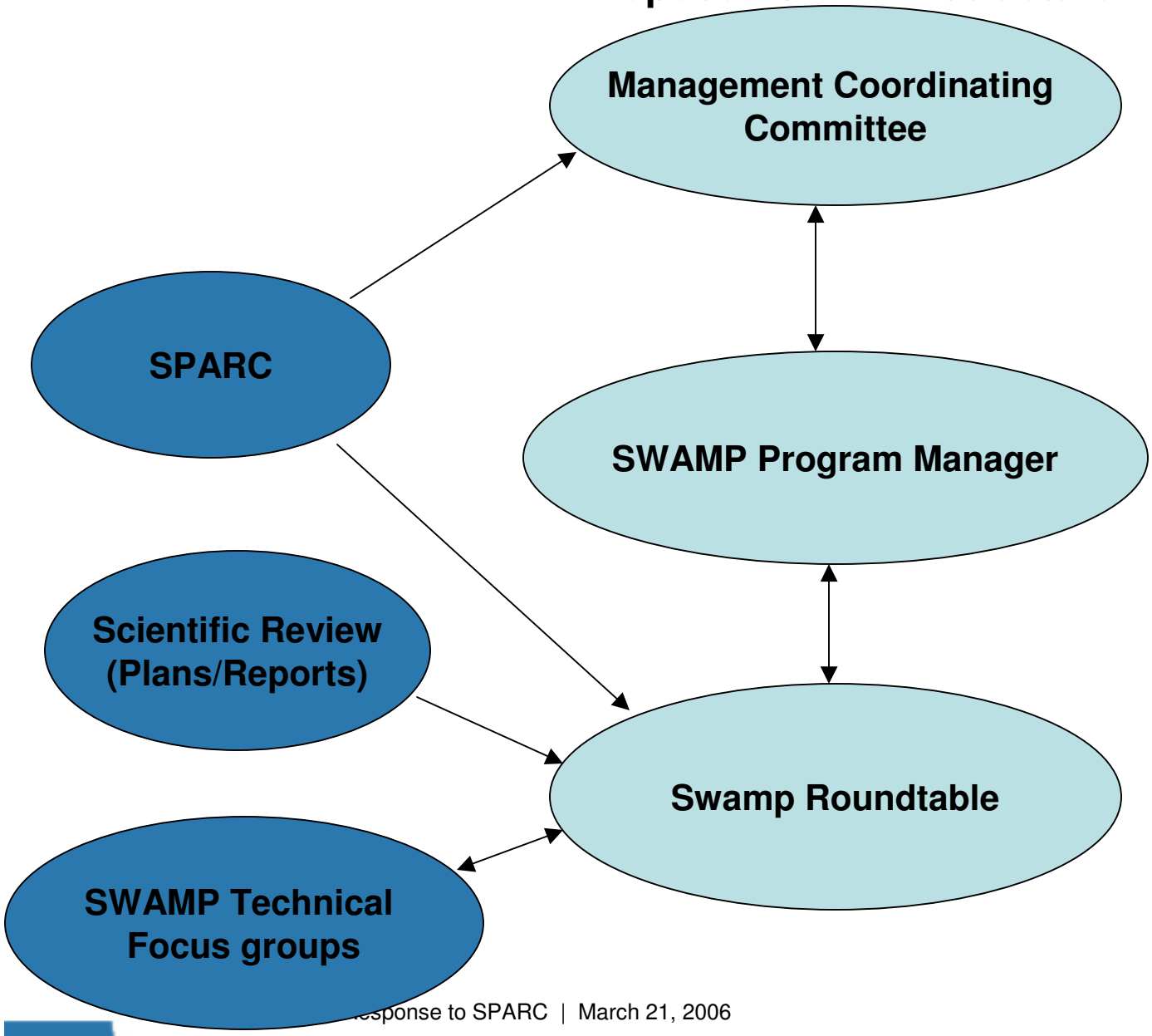


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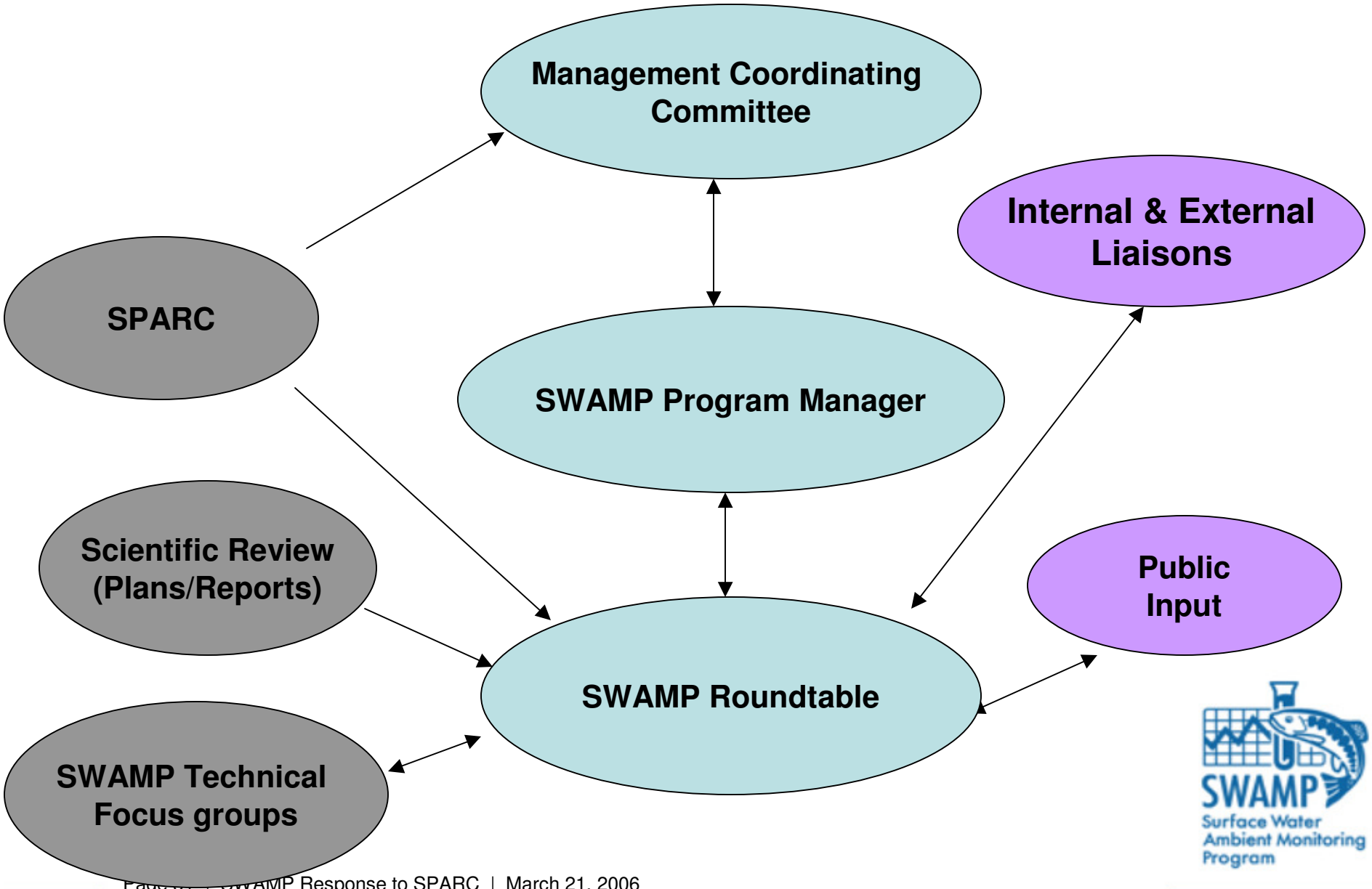


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# Implementation Strategy: "10 Elements"

- Monitoring Program Strategy (1)
- Monitoring Objectives (4)
- Monitoring Design (4)
- Core Indicators of Water Quality (2,3,4)
- Quality Assurance (2,3)
- Data Management (1,2,3)
- Data Analysis/Assessment (2,3,4)
- Reporting (2,3)
- Programmatic Evaluation (5,6)
- General Support and Infrastructure (5,6)

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# Summary

- Direct Clients:  Bd Program staff; regulated community-Client Chains
- Implementing Communication Strategy
- Developing statewide assessment framework
  - Overview
  - Biological Assessment
  - Bioaccumulative substances
  - White paper; Technical Workshops
- Proposed new organizational structure
- Developing process for budgeting/decision-making
- Business Plan (goals, objectives, tasks, products, schedule, budget and performance criteria)

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